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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/629,982	07/31/2000	Junya Kaku	000921	4508

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EXAMINER	
TRAN, NHAN T	

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 06/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/629,982	KAKU, JUNYA	
	Examiner	Art Unit	
	Nhan T. Tran	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/17/2006 & 5/15/2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *5-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *5-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/17/2006 & 5/15/2006 has been entered.

Response to Arguments

2. Applicant's arguments filed 4/17/2006 have been fully considered but they are not persuasive.

The Applicant asserts that in Mitsuhashi et al., although a quick resumption of a framing is realized, no quick confirmation of the recorded still image is realized. Thus, Mitsuhashi et al. fail to disclose or remotely suggest anything about a constitution of the present invention in which the display process of the recorded object scene image prior to resuming the display process of the real-time object scene image is permitted or prohibited depending upon the operating time period of the instruction key, and therefore, quick confirmation of the recorded object scene image and quick resumption of the framing of the object scene are accomplished. (Remarks, pages 8 & 9).

In response, the Examiner understands the Applicant's arguments. However, the Examiner respectfully disagrees. Mitsuhashi clearly discloses a quick confirmation of the recorded still image when the user shifts the shutter button 20 from second level to first level **without releasing the button**, the last recorded image is displayed after a predetermined time, e.g., 2 seconds. **See Mitsuhashi in col. 6, line 58 – col. 7, line 5**. *Note that the operative state is the state when the shutter button being pushed or pressed down to first and second levels and the non-operative state is the state when the shutter button is not pushed at all (see previous Office Action).* Furthermore, claim 5 does not require prohibiting or permitting the first displayer (displaying real time or live view moving images as in EE mode of Mitsuhashi). In fact, claim 5 requires prohibiting and permitting the second displayer (quick confirmation of a last recorded image). Claim 5 recites, "a determiner for determining, prior to starting a display process of said second displayer, whether or not said instruction key has been shifted from the operative state to the non-operative state, so as to permit said second displayer to carry out the display process during a time period of the operative state being maintained when a determination result is negative, and prohibit said second displayer from starting the display process when the determination result is affirmative." As shown in Figs. 1 & 2 and col. 6, line 58 – col. 7, line 15, Mitsuhashi clearly discloses a determiner (control unit 15 shown in Fig. 1) for determining prior starting a display process of said second displayer (for displaying the last recorded image as a review mode), whether or not the instruction key has been shifted from the operative state (first or second pushed level) to the non-operative state (non pushed level), so as to permit said second displayer to

carry out the display process during a time period of the operative state being maintained (first pushed level being maintained for 2 seconds after directly shifted from second level **without releasing the button to the non pushed level**) when a determination result is negative (the first pushed level is being maintained), and prohibit said second displayer from starting the display process when the determination result is affirmative (the button is fully released to non pushed level from the first pushed level so as to end the review mode and to resume to the real time or live view EE mode).

The Examiner believes that the amended portions of claim 5 have not overcome the teaching of Mitsuhashi. The Examiner respectfully suggests the Applicant to amend claim 5 in a way to distinguish the Applicant's invention of a single pushed level from the two pushed levels of Mitsuhashi as mentioned during the previous phone interview.

The Applicant further argues that Anderson also fails to teach the above-mentioned features. However, Anderson is relied upon for the teaching of low and high resolution images (see the previous Office Action), not for the aforesaid features.

In view of the above, the rejection of claims 5-9 is maintained.

Specification

3. A new title of the invention "AN ELECTRONIC CAMEM FOR OUICKLY CONFIRMING A RECORDED IMAGE" filed 4/17/2006 is accepted.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitsuhashi et al (US 5,497,193) in view of Anderson (US 6,512,548).

Regarding claim 5, Mitsuhashi discloses an electronic camera (Fig. 1), comprising:

an outputter (13) for repeatedly outputting an object scene image (e.g., for displaying moving images in live-view mode as an electronic viewfinder on display unit 14 or so called EE mode) when an instruction key (shutter button 20) is in non-operative state (non-pushed level) and outputting a single frame of object scene image (for recording into memory 19) when instruction key is in an operative state (second pushed level) (see Figs. 1 & 2; col. 1, lines 25-39; col. 6, line 20 – col. 7, line 15, *wherein both first and second pushed levels are the operative state of the shutter button 20*);

first displayer (display 14 with switch 16 in contact 1 for EE mode) for displaying on a monitor (14) a moving image based on the object scene images repeatedly outputted from said outputter when said instruction key is in the non-operative state (non-pushed level) (see Figs. 1 & 2; col. 7, lines 34-35 and col. 6, lines 16-29);

a recorder (19) for recording process on the single frame (a still image) of the object scene image outputted from said outputter when said instruction key is in the operative state (second pushed level) (see col. 6, lines 35-49 and col. 7, lines 43-49);

a second displayer (display 14 with switch 16 in contact 2 for review mode) for displaying on said monitor a still image based on the object scene image to be subjected to the recording process by said recorder (see Figs. 1 & 2; col. 6, line 57 – col. 7, line 15);

a determiner (control unit 15) for determining, prior to starting a display process of said second displayer, whether or not said instruction key has been shifted from the operative state (first and/or second pushed levels) to the non-operative state (non-pushed level), so as to permit said second display to carry out the display process during a time period of the operative state being maintained when a determination result is negative (the shutter button is maintained at the first pushed level for 2 seconds **without releasing the shutter button**; see col. 6, lines 57 – col. 7, line 15, wherein the step S06 is switched to step S04 if the shutter button is shifted to the first level without releasing the shutter button) and prohibit said second display process when the determination result is affirmative (shutter button is fully released to the non-pushed level to go back to EE mode in step S01 for displaying live-view images as electronic viewfinder; see Fig. 2 and col. 7, lines 49-55).

Mitsuhashi is just silent about that the outputter outputs low resolution images (moving images) for live view on the display and outputs a higher resolution image (a still image) for recording into the memory. However, as taught by Anderson, it is well

known in the art that frames of raw image data are sequentially captured by an imaging device (114) and displayed at *a reduced resolution* (402) on a LCD screen in a live-view mode before a shutter button (418) is pressed. When shutter button is pressed to capture an image, the raw image data is captured at *a higher resolution* that has been set by a user prior to the photographing session (see Fig. 6 and col. 7, lines 7-27).

Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Mitsuhashi and Anderson for displaying low resolution images on the display unit in a live view mode when the shutter button is not pressed, and for capturing a higher resolution image set by the user prior to a photography session when the shutter button is pressed as in a conventional configuration so as to reduce image processing time during the live view mode and to provide high quality image during the recording mode.

Regarding claim 6, Mitsuhashi clearly discloses that the captured still image data is displayed on the display unit as a review image for as long as the shutter button is maintained in the operative state (col. 7, lines 4-6).

Regarding claim 7, Mitsuhashi is silent about the feature recited in claim 7. Anderson further teaches a third displayer for displaying a default image (i.e., a blank image data such as a flicker or a very brief freezing image) on the display unit for a predetermined time period when the shutter button is pressed to capture the image (see Anderson, col. 10, lines 1-5). Therefore, it would have been obvious to configure the

electronic camera in Mitsuhashi to include a third displayer for displaying a brief default image on the monitor when the shutter button is pressed as taught by Anderson so as to indicate a visual message to the user that the image has been captured and recorded.

Regarding claim 8, also taught by Mitsuhashi in col. 4, lines 42-44 and/or Anderson in col. 7, lines 24-28, a memory (RAM) is used for temporarily storing the image data output from the imaging device for recording when the shutter button is pressed and that the stored image data either directly or indirectly is read out for displaying on the display unit.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mitsuhashi et al (US 5,497,193) and Anderson (US 6,512,548) as applied to claim 5 and in further view of Mizutani et al (US 6,674,464 B1).

Regarding claim 9, Mitsuhashi and Anderson are just silent about each of the first displayer and second displayer carrying out a resolution converting process (i.e., NTSC encoder) corresponding to the resolution of the noticed object scene image. Mizutani teaches an NTSC encoder (23, 23a shown in Figs. 3 and 4) to convert all image signals read out from a memory into a suitable format (including resolution) to match with resolution of the display/monitor. See Mizutani, col. 6, lines 58-65 and col. 12, lines 16-24.

Therefore, it would have been obvious to one of ordinary skill in the art to easily implement the first and second displayer to carry out a resolution converting process (i.e., by NTSC encoder) on the object scene image to a matched resolution of the display/monitor, thereby providing better reproduction of the image signals on the display/monitor.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T. Tran whose telephone number is (571) 272-7371. The examiner can normally be reached on Monday - Thursday, 7:30am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NT.

DAVID OMETZ
SUPERVISORY PATENT EXAMINER